Remarks/Arguments:

Claims 27, 28 and 35 are pending in the above-identified application. Claims 1-26, 29-32 and 34 were cancelled. Claim 33 was withdrawn from consideration.

Claim 27 was rejected under 35 U.S.C. § 103 (a) as being unpatentable in view of Rapoport et al. and "A coded light approach for depth map acquisition" to Wahl. Claim 27 is amended to include,

> ...recording media for recording depth distances of pixels on the imaged picked up, **the depth distances being calculated based on two fields of the image**, which have been taken by using different radiation patterns... (Emphasis added).

Basis for these amendments may be found in the specification at page 17, last 2 paragraphs and Figure 1. In the exemplary embodiment of Applicants' invention, **two fields of the same image** are taken by causing the light sources 2a and 2b to alternately emit light for each field. (Page 17, last paragraph and Figs. 1-3). The **depth distances** of the image may then be calculated. The taking of the two fields of the **same image** uses different radiation patterns A and B, as shown, for example, in Fig. 3.

In contrast, Rapoport records depth distances of pixels by taking in slices, which have **only one** depth distance for each image. Rapoport incrementally decreases t_{delay}, causing the background of the target to slowly disappear from the video display. (Col. 6, lines 45-47). By further decreasing t_{delay} the gate width will overlap only that portion of the returning laser pulse that illuminates the front end of the target 20, but not the portion of the returning laser that illuminates the back end of target 20, as shown in FIG. 2. (Col. 6, lines 50-54). Only the images of front posts 1 and 2 would be illuminated and displayed, while the images of rear posts 3 and 4 would be removed from view. Varying t_{delay} allows the target to be viewed in **variable depth increments** of about one foot. In contrast amended claim 1 specifies multiple depth distances for one image (Col. 6, lines 55-57). In this way, Rapoport has to take a series of images, such as the images of posts 1-4 (Figs. 1-4, reference numeral 20), with a series of pulses.

Wahl teaches projected light having a specific radiation pattern. Wahl projects Gray Code patterns sequentially on surfaces to be measured and captures the corresponding deformed code patterns with a camera. The captured code patterns are stored sequentially into subsequent bit planes of an image memory. (Abstract). Wahl does not, however, disclose recording depth distances of pixels calculated based on two fields.

Applicant's claimed features of recording depth distances of pixels on the imaged picked up, the depth distances being calculated based on two fields of the image are advantageous over the prior art because multiple depth distances may be taken of a single image without having to assemble a series of images.

Rapoport et al. and Wahl do not disclose or suggest the features of claim 27, Thus, claim 27 is not subject to rejection under 35 U.S.C. § 103(a) in view of Rapoport et al. and Wahl.

Claim 35 was rejected under 35 U.S.C. § 103 (a) as being unpatentable in view of Rapoport et al., Wahl and Yahav et al. Rapoport et al. and Wahl are described above. Yahav includes an apparatus for creating an image indicating distances to objects in a scene. The apparatus comprises a modulated source of radiation, having a first modulation function, which directs radiation toward a scene. The apparatus also comprises a detector, which detects radiation reflected from the scene, modulated by a second modulation function, and generates, responsive to said detected modulated radiation, signals responsive to the distance to regions of the scene. (Absract) Yahav et al. does not disclose recording depth distances of pixels on the imaged picked up, the depth distances being calculated based on two fields of the image, as recited in claim 27. Claim 35 depends from claim 27. Acordingly, claim 35 is not subject to rejection under 35 U.S.C. § 103(a) in view of Rapoport et al., Wahl and Yahav et al.

Claim 28 was rejected under 35 U.S.C. § 103 (a) as being unpatentable in view of Rapoport et al., Wahl and Katayama et al. and Takaha. Rapoport et al. and Wahl are described above. Katayama et al. includes a method of extracting the region of a subject image from an input image including the subject image. A

subject region mask for masking the region of the subject image is generated, and the contour of the subject region mask is shaped. (Abstract). Takaha teaches a method for designating an object image to be extracted is simplified. Positions of contour designation points are designated by employing an operation input apparatus so that a contour region of an initial region containing a desirable subjective object image is designated. (Abstract).

Rapoport et al., Wahl and Katayama et al. and Takaha do not disclose the features of claim 27. Claim 28 depends from claim 27. Acordingly, claim 28 is not subject to rejection under 35 U.S.C. § 103(a) in view of Rapoport et al., Wahl and Katayama et al. and Takaha.

In view of the foregoing amendments and remarks, this Application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

Allan Ratner, Reg. No. 19,717
Attorney for Applicants

AR/DDF/ds

Dated: March 16, 2007

P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. **18-0350** of any fees associated with this communication.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

March 16, 2007

Deborah Spratt Deborah Spratt

FP_96612